

A & B

£1.25

COMPUTING**FOR USERS OF THE BBC MICRO AND ELECTRON****Disassemble
Your Brain!****—a unique opportunity****Electron Extra****—essential reading****Making the Most
of your Micro****—with BASIC, Assembler
and Logo fun****Futures****—machine intelligence
debugged****PLUS:****Can the ABCs compete?****Econet Level 3****in Action and****Software to Blow****Your Socks Off!**

Volume Two Number Three

News 6

Keeping you in touch with the latest developments for your micro.

Soft Sector 10

We review some of the software you can expect to find on the shelves for your BBC and Electron.

Disassemble Your Brain 16

A unique and fascinating program utilising the computer to help further your understanding of how the brain works.

Intelligent Systems and the Micro 22

Is the Beeb capable of artificial intelligence?

Bouncer 26

The final piecing together of our exciting arcade game.

Making the most of BBC Basic 30

Continuing our Walk Before You Run series with a further look at graphics.

Questions and Answers 34

You provide the problems and we'll do our best to solve them.

Key to Keystick 35

At last we bring you the program that allows you to define your own command keys for games and replace keyboard controls with joysticks.

File It with File-Plus 40

Watford Electronics' ROM based database reviewed.

Software Reviews 44

Our monthly selection of games and utilities for your computer.

Group Editor: Wendy Palmer

Acting Editor: Mark Webb

Editorial Assistant: Ione Holmes

Advertising Manager: Barry Bingham

Assistant Advertising Manager: Jonathan Wall

McGarhe Editor

Chief Executive: TJ Connors

Red Shift Into Gear 5

A small company producing big strategy games for the BBC and Electron.

Making the most of Assembly 5

An introduction to assembler for newcomers to machine code.

Electron Books 5

Just some of the reading matter available exclusively for Electron users reviewed.

Electric Software 5

The Beeb's baby brother loses out in the software stakes but there are still many titles available. We've gathered together recent releases.

Edsoft 5

Acornsoft aim to lead the way in home education software for the BBC and Electron.

Making the most of Logo 6

Logical Logo is the ideal language for beginners to computing.

Turtle Fun 6

Is Acornsoft's Logo the definitive version?

A&B Computing is constantly on the look-out for well-written articles and programs for publication. If you feel that your efforts meet our standards, please feel free to submit your work to us for consideration for publication.

All submitted material should be printed or typed, double spaced. Any programs submitted should be listed (55 character width emphasised if possible). A cassette of the program alone will not be considered. All programs must come complete with a full explanation of the operation, and where relevant, the structure. We also require the program in machine readable form (cassette, 40 track 5 1/4", or 3" disc) plus any suitable screen photographs, printer dumps and so on.

All submissions will be acknowledged and the copyright in such works which will pass to Argus Specialist Publications Limited will be paid for at competitive rates. All work for consideration should be sent to the Editor at our Golden Square address.





er Three March 1985

Published by Argus Specialist Publications
Web Ltd., Number One, Golden Square, London
W1R 3AB. Tel: 01 437 0626.

All work for consideration should be sent to
Garnett Editor of A&B Computing at our Golden
Square address.

Why Not Start a Library.....	66
The BBC Guardian Software's Library Manager ROMs reviewed.	
Down to Business.....	68
Can your BBC compete as a business machine?	
Personality Tester.....	75
Mirrorsoft's program Know Your Own Personality discussed.	
Random Access.....	76
Dave Carlos advises on more of your disc problems.	
Advanced Graphics.....	78
An extract from Bruce Smith's book The BBC Micro Machine Code Portfolio.	
Let's Get Serial.....	86
The RS423 serial port can be used for connection to a printer. We show you how.	
Solar System.....	90
A space with our fascinating program displaying planetary orbits.	



A Nightingale Sings.....92

Pace combine their Nightingale modem with Commstar's ROM
to create an interesting communications package.

Analysers.....94

A pair of computer aided design programs for everyone from
the home hobbyist to the professional circuit engineer.

Beebword.....98

Our computer-based crossword.

Mailsort.....99

Your comments, hints and suggestions. Keep them coming.

Language Lab.....103

HCCS and Computerphile versions of Forth compared and
contrasted.

Cut and Thrust.....107

The traditional scissor-stone-paper game adapted for the Beeb.

Software Listings.....112

Want a new program? Check out our guide to what's available
for the BBC and Electron.

NEXT MONTH

An issue packed with features on
micros in education.

- high level networking with hard
disc based Econet level 3.
- listings to type in to make
learning fun.
- a Mode 7 toolkit to fully exploit
Teletext.

Music500 in the recording studio
and much much MORE.

A&B Computing is published monthly on the first Friday of the month preceding cover date. Distributed by: SM Distribution Ltd, 16-18 Trinity Gardens,
London SW9 8DX. Telephone: 01-274 8611. Printed in the UK by Garnett Print, Rotherham and London

The contents of this publication including all articles, designs, plans, drawings and programs and all copyright and other intellectual property rights
therein belong to Argus Specialist Publications Ltd. All rights conferred by the Law of Copyright and other intellectual property rights and by virtue of
international copyright conventions are specifically reserved to Argus Specialist Publications Ltd. Any reproduction requires the prior written consent of
Argus Specialist Publications Ltd.

Printed in the U.K. by Garnett Print, Rotherham and London.